Clean Version of the Entire Set of Pending Claims

1. Apparatus for deriving a modified program signal from a broadcast programming signal transmitted for reception by an audience and for presenting said modified program signal to an individual, said apparatus comprising, in combination,

an editing unit for generating, as a function of said broadcast programming signal, marking signals each of which includes information specifying the location of a corresponding program segment of said broadcast programming signal,

a first communication system coupled to said editing unit for transmitting said marking signals;

a receiver for receiving said broadcast programming signal;

a random access buffer memory coupled to said receiver for persistently storing a representation of said broadcast programming signal as a stored broadcast programming signal;

a second communication system for receiving said marking signals from said first communication system;

a monitor for presenting a program signal to an individual;

an input device operable by said individual for generating an instruction for selecting a specified one of said marking signals; and

a processor coupled to input device and said random access buffer memory for selectively jumping to and delivering to said monitor that program segment within said stored broadcast programming stored in said random access buffer memory that corresponds to said specified one of said marking signals.

3. The apparatus of claim 1 wherein said input device is a remote control device operated by said individual.

4. The apparatus of claim 1, wherein said receiver comprises two or more tuners for receiving and storing multiple broadcast programming signals in said buffer simultaneously.

5. The apparatus of claim 1, wherein said second communication system for receiving said marking signals, said receiver for receiving said broadcast programming signals, and said

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1. Apparatus for deriving a modified program signal from a broadcast programming signal transmitted for reception by an audience and for presenting said modified program signal to an individual, said apparatus comprising, in combination,

an editing unit for generating, as a function of said broadcast programming signal, marking signals each of which includes information specifying the location of a corresponding program segment of said broadcast programming signal,

a first communication system coupled to said editing unit for transmitting said marking signals;

a receiver for receiving said broadcast programming signal;

a random access buffer memory coupled to said receiver for persistently storing a representation of said broadcast programming signal as a stored broadcast programming signal;

a second communication system for receiving said marking signals from said first communication system;

a monitor for presenting a program signal to an individual;

an input device operable by said individual for generating an instruction for selecting a specified one of said marking signals; and

a processor coupled to input device and said random access buffer memory for selectively jumping to and delivering to said monitor that program segment within said stored broadcast programming stored in said random access buffer memory that corresponds to said specified one of said marking signals.

3. The apparatus of claim 1 wherein said input device is a remote control device operated by said individual.

4. The apparatus of claim 1, wherein said receiver comprises two or more tuners for receiving and storing multiple broadcast programming signals in said buffer simultaneously.

5. The apparatus of claim 1, wherein said second communication system for receiving said marking signals, said receiver for receiving said broadcast programming signals, and said

buffer are located at a shared server which delivers the program content on demand to said monitor in response to said input device.

6. The apparatus of claim 1, wherein said second communication system is a point-to-point communication device.

7. The apparatus of claim 6, wherein said point-to-point communication device is a cellular telephone.

8. The apparatus of claim 1, wherein said editing unit includes a time reference signal generator for generating time stamp signals and wherein said information specifying the location of a corresponding program segment of said broadcast programming signal includes a time stamp signal from said time reference signal generator representative of the start time of one of said program segments of said broadcast programming signal.

9. The apparatus of claim 8, wherein said information specifying the location of a corresponding program segment further includes a time stamp signal from said time reference signal generator representative of the ending time of said one of said program segments of said broadcast programming signal.

10. The apparatus of claim 8, wherein said information specifying the location of a corresponding program segment further includes [second communication system is further for transmitting] a signal representative of a program identification system.

11. The apparatus of claim 10, wherein said program identification system is a numerical guide.

12. The apparatus of claim 8, wherein said first communication system is further adapted for receiving said signal representative of a program identification system and for transmitting one of said marking signals in response thereto.

13. The apparatus of claim 8, wherein said receiver further includes a second time reference signal generator for generating time stamp signals which are stored at predetermined intervals to form a time based index into said stored broadcast programming signal in said random access buffer memory.

14. The apparatus of claim 8, wherein said buffer is further for marking said stored broadcast programming signal with a marker representative of a time of recording of said stored broadcast programming signal.

15. The apparatus of claim 14, wherein said processor is further for matching said time stamp signal in said marking signal with said marker, thereby synchronizing said stored broadcast programming signal with said marking signal specifying the location of a corresponding program segment.

16. The apparatus of claim 1, wherein said information including the location of corresponding program segments in said broadcast programming signal comprises a frame of video of said broadcast programming signal.

17. The apparatus of claim 16, wherein said second communication system is further for transmitting a signal representative of a program identification system.

18. The apparatus of claim 17, wherein said program identification system is a numerical guide.

19. The apparatus of claim 17, wherein said first communication system is further adapted for receiving said signal representative of a program identification system and for transmitting one of said marking signals [representative of information on a frame of video of said broadcast programming signal] in response thereto.

20. The apparatus of claim 19, wherein said second communication system is further for receiving said one of said marking signals including said frame of video of said broadcast programming signal.

21. The apparatus of claim 20, wherein said processor is further for matching said one of said marking signals including said frame of video of said broadcast programming signal with the corresponding frame of video of said stored broadcast programming signal, thereby synchronizing said stored broadcast programming signal with said one of said marking signals.

22. The apparatus of claim 1, wherein said processor comprises a selection control program for generating a signal representative of a user-specified program selection for receiving and storing a broadcast programming signal in said random access buffer memory.

23. The apparatus of claim 22, wherein said selection control program is further for monitoring said user-specified selection and generating a program selection signal representative of said user-specified program selection.

24. The apparatus of claim 1, wherein said processor comprises a viewing control program for monitoring user viewing habits and generating a viewing log of said broadcast programming signal viewed by said user.

25. The apparatus of claim 1, wherein said processor comprises a viewing control program for monitoring user viewing habits and generating a topic data signal representative of user preferences based on said viewing habits.

26. The apparatus of claim 25, wherein said processor further comprises a database memory for storing said topic data signal.

28. The apparatus of claim 1, wherein said processor comprises a viewing control program for monitoring user viewing habits and generating a priority data signal representative of user priority preferences based on said viewing habits.

29. The apparatus of claim 28, wherein said processor further comprises a database memory for storing said priority data signal.

30. The apparatus of claim 28, wherein said processor further comprises a segment processor, responsive to said priority data signal, for ordering segments of said stored broadcast programming signal according to said viewing habits.

31. The apparatus of claim 1, further comprising a data interface for coupling to a source of computer-readable data, said computer-readable data being representative of information suitable for viewing on said monitor.

32. The apparatus of claim 31, wherein said computer-readable data is representative of a beginning of a program segment.

33. The apparatus of claim 32, wherein at least one of said marking signals is generated based on said computer-readable data.

34. The apparatus of claim 31, wherein said computer-readable data comprises a menu of program segments, a beginning of each of said program segments corresponding to a particular one of said marking signals.

35. The apparatus of claim 34, wherein said computer-readable data further comprises information describing one of said program segments.

36. The apparatus of claim 35, wherein said processor is further for halting playback of said stored broadcast programming signal during viewing of said information describing one of said program segments.

37. The apparatus of claim 35, wherein said processor provides simultaneous viewing on said monitor of said stored broadcast programming signal and said program segment information.

38. The apparatus of claim 35, wherein said processor is coupled to said data interface and is adapted for determining time remaining in a program segment or a total broadcast programming signal based on said program segment information and is adapted for generating a time remaining signal.

39. The apparatus of claim 34, wherein said processor comprises a search program for searching said stored broadcast programming signal and/or said computer-readable data for the occurrence of a selected search term.

40. The apparatus of claim 1, wherein said processor further comprises a segment processor for deleting a second of said program segments in response to said marking signal, said marking signal indicating said second segment of said stored broadcast programming signal that is redundant with a first segment of said stored broadcast programming signal.

41. An apparatus for generating a proprietary program signal, comprising:

(a) an editing unit for generating, as a function of said broadcast programming signal, a first marking signal, including a blocking signal representative of information for preventing the deletion of a specified segment of said stored broadcast programming signal, representative of information for modifying said broadcast programming signal;

(b) a first communication system coupled to said editing unit for transmitting said marking signal;

(c) a receiver for receiving said broadcast programming signal;

(d) a buffer coupled to said receiver comprising a random access memory for persistently storing said broadcast programming signal as a stored broadcast programming signal;

(e) a second communication system for receiving said marking signal from said first communication system; and

(f) a processor coupled to said buffer and said second communication system for modifying said stored broadcast programming signal in response to said marking signal.

43. The apparatus of claim 41, wherein said processor is further for removing said blocking signal from said marking signal, thereby allowing deletion of said stored segment of said broadcast programming signal.

44. The apparatus of claim 41, wherein said blocking signal is representative of information for preventing the viewing of a segment of said stored broadcast programming signal.

45. The apparatus of claim 44, wherein said processor is further for removing said blocking signal from said marking signal, thereby allowing viewing of said segment of said stored broadcast programming signal.

46. The apparatus of claim 41, wherein said blocking signal is representative of information for preventing the selection of a second marking signal until after a predefined segment of said stored broadcast programming signal has been viewed.

47. The apparatus of claim 41, further comprising a marking interface coupled to said processor for receiving input signals representative of user-generated instructions for selection of a marking signal for use in modifying said stored broadcast programming signal.

48. The apparatus of claim 47, wherein said user-generated instructions are user-generated remote control instructions.

50. The apparatus of claim 1, wherein said random access buffer memory is located remotely from said monitor and is selected from the group consisting of a digital video disc, a compact disc or other media storage, an Internet server, and a cable broadcast server.

55. A method of generating a proprietary program signal, comprising the steps of:

(a) generating a first marking signal, including a blocking signal representative of information for preventing the selection of a second marking signal until after a predefined segment of a broadcast programming signal has been viewed; and

(b) transmitting said marking signal to a remote location,

whereby a user who receives said broadcast programming signal and said marking signals at said remote location is prevented from selecting said second marking signal until after a predefined segment of said broadcast programming signal denoted by said first marking signal has been viewed.

56. A method for generating a proprietary program signal, comprising the steps of:

(a) receiving a first broadcast programming signal at an editing station;

(b) generating a marking signal at said editing station representative of information for modifying said first broadcast programming signal;

(c) transmitting said marking signal from said editing station to a remote location;

(d) monitoring user viewing habits during the viewing of said first broadcast programming signal at said remote location;

(e) generating a viewing log signal at said remote location in response to said user viewing habits during viewing of said first broadcast programming signal;

(f) transmitting said viewing log signal from said remote location to said editing station;

(g) receiving a second broadcast programming signal at said editing station;

(h) generating a second marking signal at said editing station representative of information for modifying said second broadcast programming signal in response to said viewing log signal; and

(i) transmitting said second marking signal from said editing station to said remote location for modifying said second broadcast signal at said remote location.

61. A method for generating a proprietary stored program signal, comprising the steps of:

(a) receiving a first set of broadcast programming signals in response to a plurality of user-specified program selections;

(b) storing said first set of broadcast programming signals;

(c) monitoring said user-specified program selections;

(d) generating a program selection signal representative of said user-specified program selections; and

(e) receiving and storing a second set of broadcast programming signals in response to said program selection signal.

63. A method of generating a proprietary program signal, comprising the steps of:

(a) generating a marking signal representative of information for modifying a broadcast programming signal;

(b) transmitting said marking signal to a remote location;

(c) generating computer-readable data, said computer-readable data being representative of a menu of program segments, each of said program segments corresponding to a particular marking signal;

(d) transmitting said computer-readable data to said remote location,

whereby a viewer at said remote location may select a marking signal for modifying said broadcast programming signal based on said computer-readable data.

64. The method of claim 63, wherein said computer-readable data further comprises program segment information.

65. The method of claim 64, further comprising the step of halting playback of said broadcast programming signal during viewing of said program segment information.

66. The method of claim 64, further comprising the step of viewing said program segment information simultaneously with viewing said broadcast programming signal.

67. The method of claim 64, further comprising the steps of:

(a) generating a time remaining signal based on said program segment information and representative of the time remaining in a program segment or a total broadcast programming signal; and

(b) displaying the time remaining in a program segment or total broadcast programming signal based on said time remaining signal.

68. The method of claim 63, further comprising the steps of:

(a) receiving computer-readable data representative of viewer comments related to said broadcast programming signal; and

(b) transmitting said computer-readable data representative of viewer comments to said remote location.